

Appln. No. 10/789,715
Amendment dated January 20, 2006
Reply to Office Action mailed October 20, 2005

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims (deleted text being struck through and added text being underlined):

1. (Currently Amended) A metal detection system with a magnetometer head coupleable to ~~conventional footwear~~ footwear, the system comprising:

a magnetometer assembly adapted for passing over a surface and detecting metal below the surface;

a control assembly operationally coupled to said magnetometer assembly, said control assembly facilitating operational control of said magnetometer assembly; and

a coupling means operationally coupling said magnetometer assembly to the ~~conventional footwear~~ footwear;

wherein said coupling means further comprises:

a strap assembly adapted for being secured around a heel portion of the footwear, said strap assembly having a first end positionable adjacent to a first side of the footwear, said strap assembly having a second end positionable along a second side of the footwear and over a top of the footwear, said second end being selectively securable to said first end whereby said strap assembly is selectively secured to the footwear;

and an extension means operationally coupled between said strap assembly and said magnetometer assembly, said extension means facilitating placement of said magnetometer assembly away from a foot of a user;

wherein said extension means further comprises:

a horizontal extent with a first end operationally coupled to said strap assembly, said horizontal extent facilitating a lateral distance between the foot of the user and the magnetometer assembly; and

Appln. No. 10/789,715
Amendment dated January 20, 2006
Reply to Office Action mailed October 20, 2005

a vertical extent operationally coupled between a second end of said horizontal extent and said magnetometer assembly, said vertical extent facilitating a vertical placement of said magnetometer assembly above a surface.

2. (Original) The system of claim 1, further comprising a cable assembly having a first end coupled to said magnetometer assembly, said cable assembly having a second end coupled to said control assembly, said cable assembly routing signal communication between said magnetometer assembly and said control assembly.

3. (Original) The system of claim 1, further comprising:
a first transceiver operationally coupled to said magnetometer assembly for transmitting signal from said magnetometer assembly and receiving signals from said control assembly;
a second transceiver operationally coupled to said control assembly for transmitting signals from said control assembly and receiving signals from said magnetometer assembly.

4. (Original) The system of claim 1, wherein said control assembly further comprises a housing, said housing being coupleable to an article of clothing of a user facilitating hands-free operation.

5. (Currently Amended) The system of claim 1, wherein said coupling means further comprises a strap assembly adapted for being secured around a ~~heel~~ heel portion of the ~~conventional footwear~~ footwear, said strap assembly having a first end positionable adjacent to a first side of the ~~conventional footwear~~ footwear, said strap assembly having a second end positionable along a second side of the ~~conventional footwear~~ footwear and over a top of the ~~conventional footwear~~ footwear, said second end being selectively securable to said first end whereby said strap assembly is selectively secured to the ~~conventional footwear~~ footwear.

Appln. No. 10/789,715
Amendment dated January 20, 2006
Reply to Office Action mailed October 20, 2005

6. (Original) The system of claim 5, wherein said strap assembly further comprises a first portion of hook and loop fastener operationally coupled to said first end of said strap assembly and a second portion of hook and loop fastener operationally coupled to said second end of said strap assembly, said first portion of hook and loop fastener being complementary to said second portion of hook and loop fastener.

7. (Currently Amended) The system of claim 1, further comprising:
said control assembly further comprises a housing, said housing being coupleable to an article of clothing of a user facilitating hands-free operation;

said coupling means further comprises a strap assembly adapted for being secured around a heel portion of the ~~conventional footwear~~ footwear, said strap assembly having a first end positionable adjacent to a first side of the ~~conventional footwear~~ footwear, said strap assembly having a second end positionable along a second side of the ~~conventional footwear~~ footwear and over a top of the ~~conventional footwear~~ footwear, said second end being selectively securable to said first end whereby said strap assembly is selectively secured to the ~~conventional footwear~~ footwear; and

said strap assembly further comprises a first portion of hook and loop fastener operationally coupled to said first end of said strap assembly and a second portion of hook and loop fastener operationally coupled to said second end of said strap assembly, said first portion of hook and loop fastener being complementary to said second portion of hook and loop fastener.

8. (Original) The system of claim 7, further comprising a cable assembly having a first end coupled to said magnetometer assembly, said cable assembly having a second end coupled to said control assembly, said cable assembly routing signal communication between said magnetometer assembly and said control assembly.

Appln. No. 10/789,715
Amendment dated January 20, 2006
Reply to Office Action mailed October 20, 2005

9. (Original) The system of claim 7, further comprising:

a first transceiver operationally coupled to said magnetometer assembly for transmitting signal from said magnetometer assembly and receiving signals from said control assembly;

a second transceiver operationally coupled to said control assembly for transmitting signals from said control assembly and receiving signals from said magnetometer assembly.

10. (Original) The system of claim 7, wherein said control assembly further comprises an aural alert generator, said aural alert generator emitting an aural alert when said magnetometer assembly detects metal, said aural alert generator facilitating signaling the user of a presence of metal below said magnetometer assembly.

11. (Original) The system of claim 1, wherein said control assembly further comprises an aural alert generator, said aural alert generator emitting an aural alert when said magnetometer assembly detects metal, said aural alert generator facilitating signaling the user of a presence of metal below said magnetometer assembly.

12. through 13. (Cancelled)

14. (Currently Amended) The system of claim [[[12]]] 1, wherein said extension means being adapted for positioning said magnetometer assembly in front of the user.

15. through 20. (Cancelled)

Appln. No. 10/789,715

Amendment dated January 20, 2006

Reply to Office Action mailed October 20, 2005

21. (New) In combination:

an article of footwear having a toe portion located towards a front of the foot wear and a heel portion located towards a rear of the footwear; and
a metal detection system removably mounted on the article of footwear, the system comprising:

a magnetometer assembly configured to detect metal below a surface when the magnetometer assembly is passed over the surface;

a control assembly operationally coupled to said magnetometer assembly for controlling said magnetometer assembly; and

a coupling means for removably coupling said magnetometer assembly to the article of footwear, said coupling means being configured such that said magnetometer assembly is supported rearwardly of the heel portion of said article of footwear.

22. (New) The combination of claim 21 wherein said coupling means further comprises:

a strap assembly removably secured around the heel portion of said article of footwear, said strap assembly having a first end positionable adjacent to a first side of said article of footwear, said strap assembly having a second end positionable along a second side of said article of footwear and over a top of said article of footwear, said second end being selectively securable to said first end for selectively securing said strap assembly to said article of footwear;

an extension means for positioning said magnetometer assembly away from a foot of a user, said extension means being operationally coupled between said strap assembly and said magnetometer assembly; wherein said extension means further comprises:

a horizontal extent with a first end operationally coupled to said strap assembly, said horizontal extent producing a lateral spacing between the foot of the user and the magnetometer assembly; and

Appln. No. 10/789,715

Amendment dated January 20, 2006

Reply to Office Action mailed October 20, 2005

a vertical extent operationally coupled between a second end of said horizontal extent and said magnetometer assembly, said vertical extent producing a vertical spacing of said magnetometer assembly above a surface.

23. (New) The combination of claim 21, further comprising a cable assembly having a first end coupled to said magnetometer assembly, said cable assembly having a second end coupled to said control assembly, said cable assembly routing signal communication between said magnetometer assembly and said control assembly.

24. (New) The combination of claim 21, further comprising:
a first transceiver operationally coupled to said magnetometer assembly for transmitting signal from said magnetometer assembly and receiving signals from said control assembly;

a second transceiver operationally coupled to said control assembly for transmitting signals from said control assembly and receiving signals from said magnetometer assembly.

25. (New) The combination of claim 21, wherein said control assembly further comprises a housing, said housing being coupleable to an article of clothing of a user facilitating hands-free operation.

26. (New) The combination of claim 21, wherein said coupling means further comprises a strap assembly adapted for being secured around a heel portion of said article of footwear, said strap assembly having a first end positionable adjacent to a first side of said article of footwear, said strap assembly having a second end positionable along a second side of said article of footwear and over a top of said article of footwear, said second end being selectively securable to said first end whereby said strap assembly is selectively secured to said article of footwear.

Appln. No. 10/789,715
Amendment dated January 20, 2006
Reply to Office Action mailed October 20, 2005

27. (New) The system of claim 26, wherein said strap assembly further comprises a first portion of hook and loop fastener operationally coupled to said first end of said strap assembly and a second portion of hook and loop fastener operationally coupled to said second end of said strap assembly, said first portion of hook and loop fastener being complementary to said second portion of hook and loop fastener.